Catalogue of American Amphibians and Reptiles.

Tanner, Wilmer W. 1988. *Eumeces skiltonianus.*

Eumeces skiltonianus (Baird and Girard) Western Skink

Plestiodon skiltonianum Baird and Girard, 1852:69. Type-locality, "Oregon," restricted to [the vicinity of] the Dalles [on the Columbia River, Wasco Co., Oregon] by Smith and Taylor (1950). Lectotype, National Museum of Natural History (USNM) 3172b, collected by Rev. G. R. Geary, date unknown (examined by author).

Eumeces quadrilineatus Hallowell, 1859:10 (not of Blyth, 1853). Type-locality, "Upper California, near Mohave river and in San Bernardino Valley, [San Bernardino Co., California]," restricted to the Mojave River by Smith and Taylor (1950). Holotype, National Museum of Natural History (USNM) 3168, collected by A. L. Heermann, date unknown (examined by author).

Eumeces skiltonianus: Cope, 1875:45. First use of combination.

Eumeces hallowellii: Bocourt, 1879:435.

Plestiodon skiltonianus: Van Denburgh, 1922:578 (part).

• **Content**. Four subspecies are recognized: *skiltonianus, utahensis, interparietalis,* and *lagunensis.*

• **Definition and Diagnosis** A medium-sized North American skink (adults to 83 mm SVL) characterized by: dorsal scales equal in size or nearly so; lateral body scales in parallel rows; four longitudinal light stripes extending from the head and usually onto the tail; dorsolateral light stripes beginning on the supralabials, passing through the upper part of the ear, and involving the second and third lateral scale rows on neck. Stripes usually remain distinct in adults. There are normally 26 scale rows, occasionally 24 or 28. There are 7-8 supralabials, 6 infralabials, 2 postmentals and 1 postnasal.

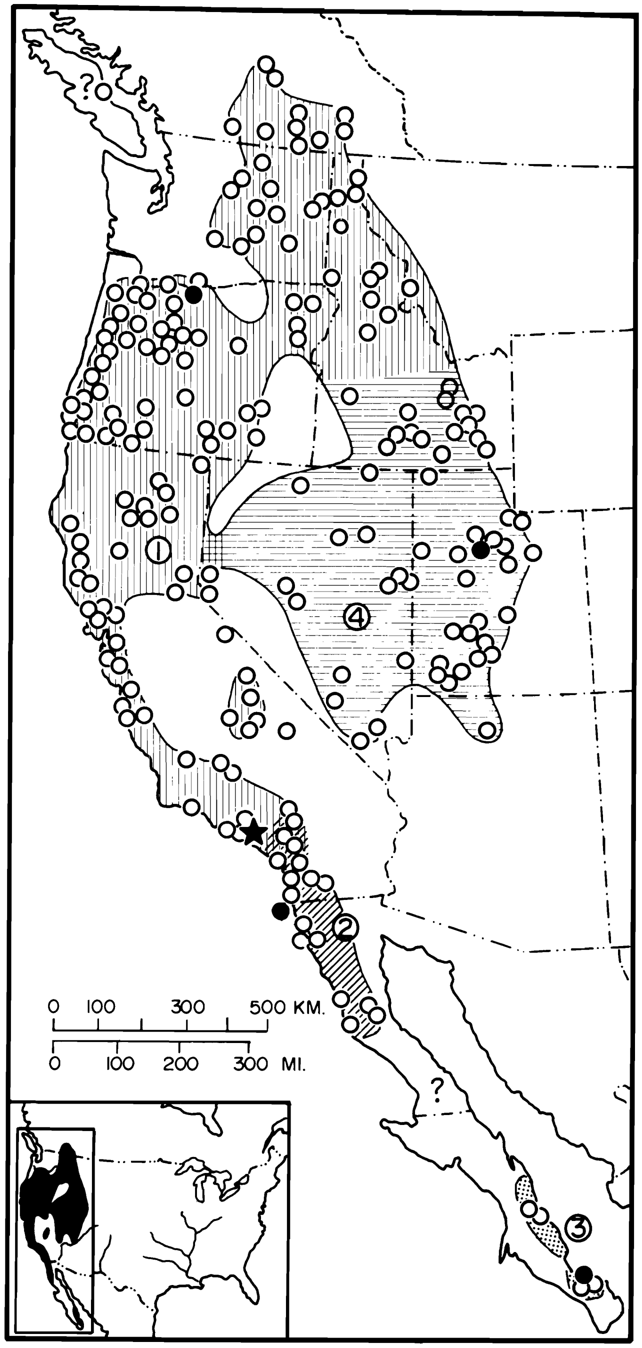
• **Descriptions**. The original descriptions are brief, and appeared at about the same time in two publications (Baird and Girard, 1852, 1853). Other descriptions are by Hallowell (1859) and Cope (1875). General accounts, descriptions and keys are in Van Denburgh (1922), Taylor (1935), Smith (1946), Rodgers and Fitch (1947), and Tanner (1957). Deweese and Wright (1970) describe the karyotype.

• **Illustrations.** Cope (1900) provides line drawings of the head and pelvic area, and Tanner (1957) of the dorsal pattern. Behler and King (1979) provide a color photograph. Black and white photographs are in Van Denburgh (1922), Taylor (1935), Smith (1946), and Tanner (1957). Stewart and Daniel (1975) and Schwenk (1985) provide scanning electron micrographs of scale microarchitecture and lingual anatomy, respectively.

• **Distribution.** *Eumeces skiltonianus* ranges from southern British Columbia, Canada, southward to the southern tip of Baja California, México, and eastward to eastern Utah. The populations in Baja California del Sur (*E. s. lagunensis*) and east of the Sierra Nevada (*E. s. utahensis*) are disjunct. The species is partial to open areas within wooded foothills, usually associated with rocks under or beside which it builds tunnels for escape or nesting. Individuals have been taken from near sea level in California to elevations of approximately 2500 m in southern Utah, southern Nevada, and northern Arizona.

• **Fossil Record** Brattstrom (1953) lists Recent fossils of *Eumeces skiltonianus.*

• **Pertinent Literature** Taylor (1935) provides an in-depth study of distribution and taxonomy of the species. Smith (1946) and Stebbins (1985) discuss life-history characteristics. Rodgers and Fitch (1947) compare the species with *E. gilberti,* and Robinson (1979) discusses the relationship between the *brevirostris* and *skiltonianus* species groups. Stewart and Daniel (1975) discuss scale microornamentation. Stebbins (1948), Nash and Tanner (1970), Wever (1973) and Schwenk (1985) provide anatomical data. Kingman (1932) compares skull morphology to other species of *Eumeces.* Tanner (1943, 1957) discusses taxonomy, distribution, life-history, and ecology. Brattstrom (1965) provides data on body temperatures during activity. Vitt et al. (1977) discuss tail autotomy and Punzo (1982) presents data on clutch and egg size. Zoogeographical and ecological notes are in Zweifel (1958), Banta (1962), and Fuentes (1976). Gorman et al. (1971), Guttman (1971) and Murphy et al. (1983) present biochemical data. Telford (1970) presents data on parasites.



Map. Solid symbols mark type localities, open symbols indicate other records. A star marks the known fossil locality. Overlapping shading patterns indicate an area of apparent intergradation between subspecies.

• **Etymology.** The patronym *skiltonianus* honors Dr. Avery J. Skilton who, as curator of the Troy Lyceum of Natural History in New York state, received the type specimens and passed them on to Baird at the U. S. National Museum. The names *utahensis* and *lagunensis* refer to geographic origin of types, and *interparietalis* to a diagnostic feature of the taxon.

• **Remarks.** Taylor (1935) designated the smaller cotype (USNM 3172b) as the lectotype, although Baird (1853) illustrated the larger cotype (USNM 3172a).

• **Comment.** Rodgers and Fitch (1947) provide an in-depth analysis of the color patterns of *Eumeces skiltonianus skiltonianus* and four subspecies of *E. gilberti*. Specimens examined included adults and juveniles and provided the evidence necessary to finally separate these two closely related sympatric species. The fact that the pink tail occurs in both branches of the *skiltonianus* group suggests that this character may have existed in the ancestral stock and is retained in some segments of both species. The size of the posterior supralabial also varies within both branches; in the species *skiltonianus* variation increases from north to south, and southern populations possess a larger scale.

1. *Eumeces skiltonianus skiltonianus* (Baird and Girard) Western Skink

Plestiodon skiltonianum Baird and Girard, 1852:69. See species synonymy.
Eumeces skiltonianus amblygrammus Cope, 1900:643. Type-locality, "Fort Humboldt, California." Holotype, National Museum of Natural History (USNM) 3166, collected by Lt. Beckwith, date unknown (examined by author).
Plestiodon skiltonianus: Van Denburgh, 1922:578 (part). See species synonymy.
Eumeces skiltonianus skiltonianus: Taylor, 1935:415 (part). First use of combination.

• **Definition.** The dorsolateral light stripe is narrow, usually occupying no more than half of the second scale row from the mid-dorsal line. The width of the dorsolateral light stripe at mid-body is less than half that of the dark dorsal interspaces. The first nuchal is noticeably larger than the second, and its length is greater than the width of the dorsolateral light stripe. The lateral light stripes are bordered ventrally by a narrow dark stripe. There are usually seven supralabials. The tail is bright blue, fading to a grayish-blue or brown in adult females.

2. *Eumeces skiltonianus utahensis* Tanner Great Basin Skink

Eumeces skiltonianus utahensis Tanner, 1957:67. Type-locality, "southeastern edge of Cedar Valley, approximately one-half mile directly west of Chimney Rock, Utah County, Utah." Holotype, Brigham Young Univ. 6945, adult female, collected by W. W. Tanner, 10 June 1944 (examined by author).

• **Definition.** The dorsolateral light stripe occupies more than half of the second scale row at mid-body, and is equal in width to more than half that of the dark dorsal inter-spaces. The lateral light stripe lacks a narrow dark one bordering ventrally and blends with the ventral coloration. The first nuchal is usually larger than the second, and is as long as or shorter than the width of the dorsolateral light stripe. There are usually eight supralabials. The light striping and blue tail are subdued, especially in adult females, leading to a blending of lateral and ventral aspects.

• **Remarks.** The subspecies occurs in the Great Basin of Nevada and Utah, and in extreme southcentral Oregon. It extends into the Snake River valley of southern Idaho, and into the Wasatch and Uintah Mountains of northern and central Utah. It has not crossed the Green or Colorado Rivers but does extend south along the high plateaus of central Utah to the Kaibab Plateau of northern Arizona. The range has recently been extended eastward into Duchense County, Utah. A discontinuous pattern of distribution occurs in the block-fault ranges of Nevada and western Utah, where the subspecies is restricted to pine and sclerophyllic woodlands, or riparian habitats.

3. *Eumeces skiltonianus interparietalis* Tanner Coronado Island Skink

Eumeces skiltonianus interparietalis Tanner, 1957:73. Type-locality, "South Coronado Island, Baja California [del Norte], Mexico." Holotype, Cal. Acad. Sci. 13576, adult male, collected by Rollo Beck, 7 April 1908 (examined by author).

• **Definition.** The interparietal is small and enclosed posteriorly by the parietals. The tail is blue in juveniles. The median and lateral dark stripes extend to or beyond the middle of the tail. There are usually seven supralabials of equal size, the seventh with a narrow contact with the upper secondary temporal.

• **Remarks.** The subspecies is limited to the mountainous areas of Baja California Norte and adjoining areas in extreme southern San Diego County, California. Small populations occur on Coronado and Todos Santos Islands (Zweifel, 1952).

4. *Eumeces skiltonianus lagunensis* Van Denburgh San Lucan Skink

Eumeces lagunensis Van Denburgh, 1895:134. Type-locality, "San Francisquito, Sierra Laguna, [Baja California del Sur, Mexico]." Holotype, Cal. Acad. Sci. 400, collected 28 March 1892 by Gustav Eisen, destroyed during the San Francisco earthquake of 1906. Neotype, designated by Smith and Taylor (1950), National Museum of Natural History (USNM) 67398, collected "on the trail between Loreto and Comondu, [Baja California del Sur, Mexi co]" by W. M. Mann in February, 1924 (examined by author).
Plestiodon lagunensis: Van Denburgh and Slevin, 1921:49.
Plestiodon skiltonianus lagunensis: Nelson, 1922:114. First use of trinomial.
Eumeces skiltonianus lagunensis: Linsdale, 1932:374. First use of combination.

• **Definition.** The interparietal is small and enclosed posteriorly by the parietals. The seventh supralabial is greatly enlarged, often nearly twice the size of the sixth, and has a broad contact with the upper secondary temporal. The tail of juveniles is pink, becoming olive-brown in adults.

• **Remarks.** The subspecies occurs in the southern third of Baja California. It has not been found in the central (Vizcaino) desert, and thus approximately 450 km separates it from the subspecies *interparietalis*. Nelson (1922) and Linsdale (1932) considered *E. lagunensis* to be a subspecies of *skiltonianus*. Taylor (1935) retained *E. lagunensis* as a species in the *skiltonianus* group, based on the characters given above as well as the occurrence of a pink tail in hatchlings. Tanner (1957) followed Taylor (1935) but did point out the similarities between *E. s. interparietalis* and *E. lagunensis*.

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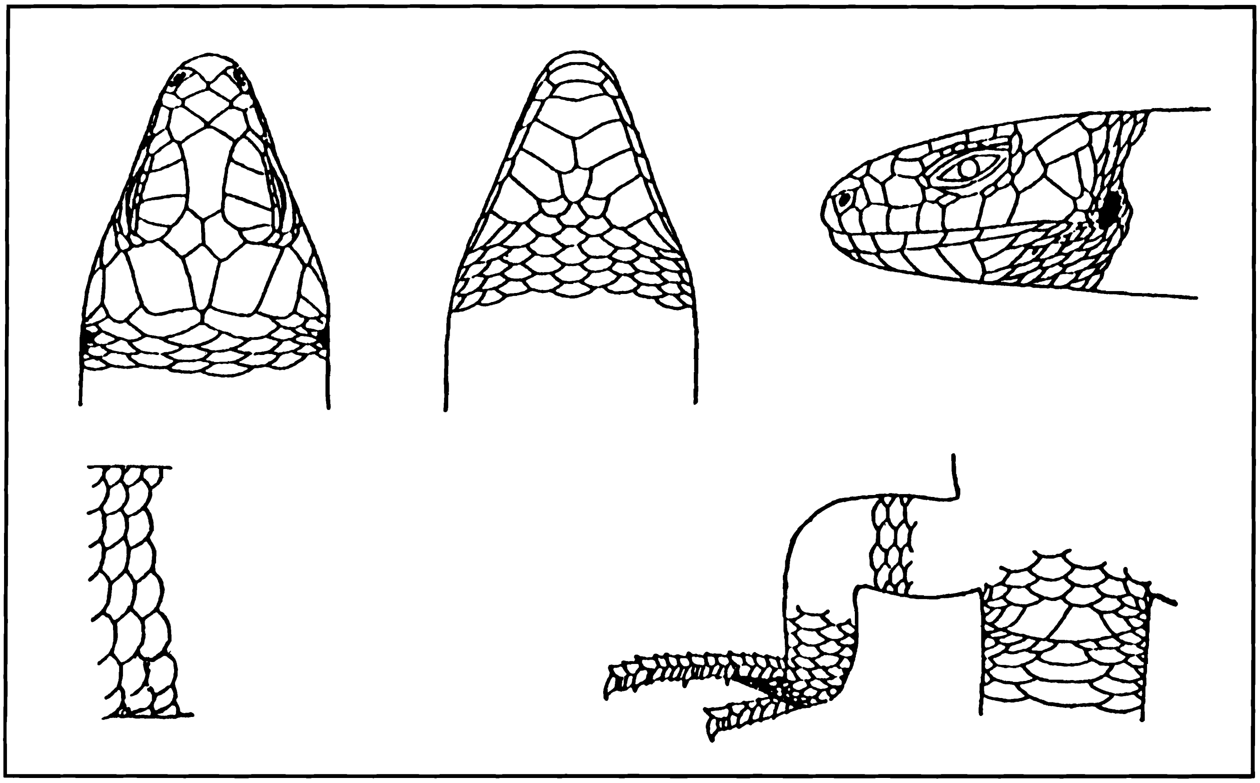


Figure. *Eumeces skiltonianus,* from Cope (1900): USNM 11756, Fresno, California.

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